

CDSH6-16-G

High Speed
RoHS Device

Features

- Fast Switching Speed
- For general purpose switching applications.
- High conductance.

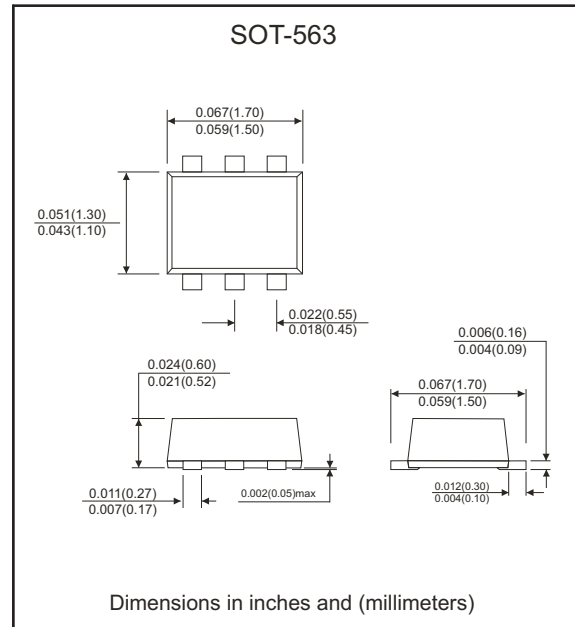
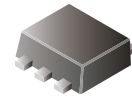
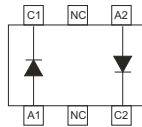
Mechanical data

Case: SOT-563, Molded Plastic

Terminals: Solderable per MIL-STD-202, Method 208

Marking: KAM

Circuit diagram



Maximum Rating (at TA=25 °C unless otherwise noted)

| Parameter | Symbol | Max | Unit |
|---|---------------------------------|-------------|------|
| Non-repetitive peak reverse voltage | V_{RM} | 100 | V |
| Peak repetitive peak reverse voltage Working peak reverse voltage DC blocking voltage | V_{RRM} V_{RWM} V_R | 75 | V |
| RMS reverse voltage | $V_{R(RMS)}$ | 53 | V |
| Forward continuous current | I_{FM} | 300 | mA |
| Averaged rectified output current | I_o | 200 | mA |
| Peak forward surge current @t=1.0µs @T=1.0s | I_{FSM} | 2 1 | A |
| Power dissipation | P_D | 150 | mW |
| Thermal resistance, junction to air | $R_{\theta JA}$ | 833 | °C/W |
| Junction temperature | T_J | 150 | °C |
| Storage temperature | T_{STG} | -65 to +150 | °C |

Electrical Characteristics (at TA=25 °C unless otherwise noted)

| Parameter | Conditions | Symbol | Min | Max | Unit |
|---------------------------------|--|----------|-----|-----------------------------|----------|
| Reverse breakdown voltage | $I_R=100\mu A$ | V_{BR} | 75 | | V |
| Reverse voltage leakage current | $V_R=75V$ $V_R=20V$ | I_R | | 1 25 | µA nA |
| Forward voltage | $I_F=1mA$ $I_F=10mA$ $I_F=50mA$ $I_F=150mA$ | V_F | | 0.715 0.855 1 1.25 | V |
| Diode capacitance | $V_R=0V, f=1MHz$ | C_T | | 2 | pF |
| Reverse recovery time | $I_F=I_R=10mA, I_{rr}=0.1 \times I_R, R_L=100\Omega$ | t_{rr} | | 4 | nS |

Typical Characteristics (CDSH6-16-G)

Fig.1 Forward Power Derating Curve

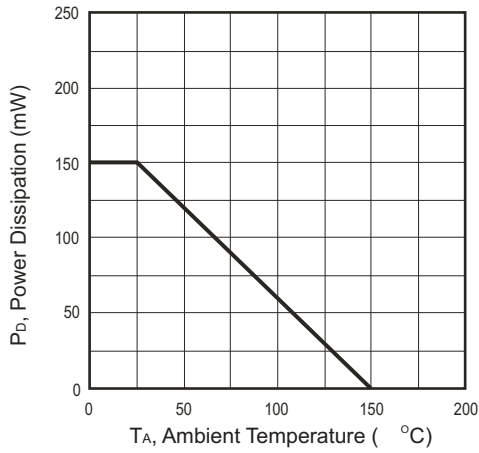


Fig.2 Typical Forward Characteristics

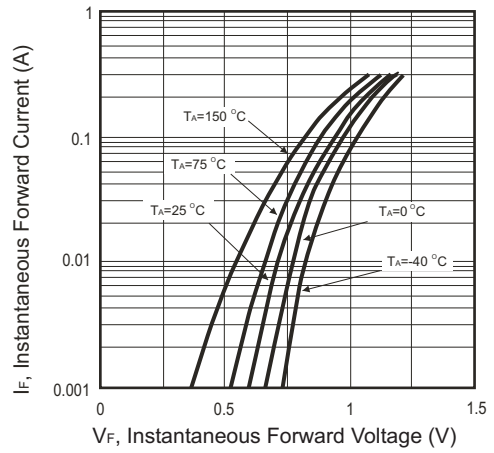


Fig.3 Typical Diode Capacitance Characteristics

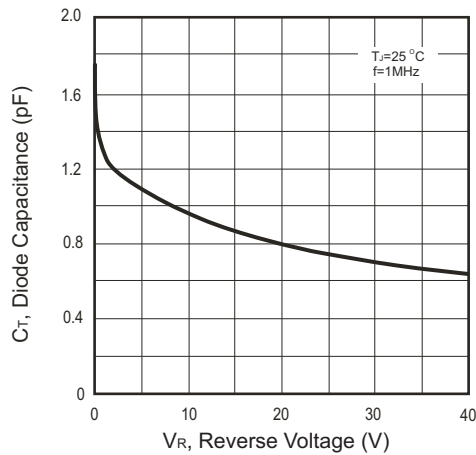


Fig.4 Typical Reverse Current Characteristics

